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#### DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND 1339 ISAAC HULL AVE SE WASHINGTON NAVY YARD DC 20376-0001

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#### POLICY LETTER 01-04

From: Commander, Naval Sea Systems Command

Subj: SOFTWARE CONFIGURATION DATA ON NAVY PLATFORMS AND ASSOCIATED TRAINING SITES

Ref: (a) NAVSEA SL720-AA-MAN-010 and SL720-AA-MAN-020
Fleet Modernization Program (FMP) Management and
Operations Manual Rev 1 dtd June 2002

- (b) NAVSEAINST 4130.12 Series, Subj: Configuration Management Policy and Guidance
- (c) NAVSEAINST 4130.16, Series Subj: Identification Practices for Systems, Equipment, Computer Software and Firmware
- (d) NAVSEA Technical Specification 9090-700 Series, Ship Configuration and Logistics Support Information System (SCLSIS)
- (e) COMNAVSEASYSCOM 00 MSG DTG 150405ZJUN01, Use of Configuration Data Managers' Database-Open Architecture (CDMD-OA) for the NAVSEA Corporation

Encl: (1) Detailed Software Procedures Management Plan

1. Purpose. This letter disseminates policy and guidance for the requirement to identify, document, and control Configuration Status Accounting (CSA) records for software contained in or associated with systems and equipment on U.S. Navy platforms and related shore and training sites. It expounds on the Configuration Management requirements outlined in references (a) through (d) to document and maintain all hardware, software and firmware for U.S. Navy Platforms and associated Training Sites - hereafter identified as "total configuration" in a single central configuration data repository. The necessity to document and track hardware, software and firmware configuration is not a new requirement. Reference (e) restated the requirement and mandated the use of a single authoritative central repository, Configuration Data Managers' Database - Open Architecture (CDMD-OA) to load and track all configuration data.



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The overarching responsibilities and requirements for CSA of tactical software and Navy Managed Data Systems (i.e. SNAP, OMMS, OMMS-NG, etc.) remain predominately the same as the hardware CSA requirements to include the same level of attention to software programs (and the associated technical characteristics data/documentation) throughout their life cycle.

The objectives of this letter are to ensure:

- a. All software is identified to its associated application,
- b. A software configuration baseline is established, documented and maintained as a Configuration Item Record within CDMD-OA,
- c. All follow-on revisions, patches, and other software changes are documented within CDMD-OA,
- d. Fleet personnel, Platform Managers, Acquisition and Life-cycle Managers have access to all software configuration records, and
  - e. A Configuration Manager for software is identified.
- 2. Scope. This policy letter applies to all software installations on ships, submarine units, supporting shore and training sites assigned to the Commander, Fleet Forces Command (CFFC) Atlantic and Pacific. Reactor plant systems and equipment under the cognizance of the NAVSEA Deputy Commander for Nuclear Propulsion (NAVSEA 08) are excluded from this policy letter. Such matters shall be handled as directed by NAVSEA 08. NAVSEA 08 shall be consulted in the application of the provisions of this letter to areas that may affect the nuclear propulsion plant or associated nuclear support facilities. TRIDENT System and Marine Gas Turbine Configuration Management are separately governed by NAVSEA TL130-AB-PLN-010-TRIDENT System Configuration Management Plan and NAVSEAINST 4130.11 Series, Joint Configuration Management of Marine Gas Turbine Equipment and Gas Turbine Ship Engineering Control System.
- 3. <u>Discussion</u>. As a result of the Navy's ongoing efforts to provide the Fleet with the latest technology, increased reliance on computers and associated software has presented new configuration challenges beyond the scope of present configuration management policies and procedures. One of the most critical new challenges facing the Navy today is maintaining readiness at the Strike Force level. Strike Force interoperability requires inter-ship communications and interdependent logistics support for multiple surface and subsurface platforms that deploy concurrently. It is fundamental that configuration data is accurate to ensure ships

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have compatible communication and computer systems, as well as logistics support products. Any discrepancies can severely impact Strike Force mission operations.

Lack of centralized software CSA does not allow for efficient and effective cross-platform configuration assessments, determination of unit capabilities, or sufficient training and support. inability to access Fleet software information through a centralized source has hampered the Fleet's ability to address and resolve these issues.

Policy. Software shall be tracked along with the software's associated hardware configuration. These aggregated records shall provide total centralized visibility and accessibility to support management and control of all configuration assets within the Configuration Management (CM) process. Software Support Activities (SSAs)/Technical Support Activities (TSAs), In-Service Engineering Agents (ISEAs), and Original Equipment Manufacturers (OEMs), etc. under the direction of Ship Program Managers (SPMs), shall be responsible for ensuring an accurate account of the current installed total configuration.

This letter incorporates all the requirements into one document for ease of use, and understanding while acting as a quick reference guide to assist in institutionalizing this policy.

5. Guidance. The intent of this letter is to provide an interim "One Stop Quick Reference Guide" until CDMD-OA has been modified to automate the procedures contained in enclosure (1) of this policy letter. When the modification has been completed the procedures will be updated accordingly, this policy letter will be cancelled, and the software requirements and procedures will be incorporated into NAVSEAINST 4130.12B. SEA 04L5, as the CM Policy and Process owner, shall be available to assist all program offices in clarification of this software policy and process.

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Subj: SOFTWARE CONFIGURATION DATA ON NAVY PLATFORMS AND

ASSOCIATED TRAINING SITES

Copy to:

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POLICY LETTER 01-04

DETAILED SOFTWARE PROCEDURES MANAGEMENT PLAN

MAY 2004

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#### REFERENCES

- (a) NAVSEA SL720-AA-MAN-010 and SL720-AA-MAN-020 Fleet Modernization Program (FMP) Management and Operations Manual Rev 1 dtd June 2002
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- NAVSEA Technical Specification 9090-700 Series, Ship (d) Configuration and Logistics Support Information System (SCLSIS)
- COMNAVSEASYSCOM 00 MSG DTG 150405ZJUN01, Use of (e) Configuration Data Managers' Database-Open Architecture (CDMD-OA) for the NAVSEA Corporation
- Warfare Systems Guidance & Policy Paper 99-05, Software (f) Quality Improvement (SQI) Program

#### SOFTWARE CONFIGURATION STATUS ACCOUNTING

# SECTION 1 Method for Tracking Software Configuration

1.1 Scope. This Software Management Plan addresses the business rules and detailed requirements for identifying and tracking the necessary software for systems to meet the ship and Strike Force missions in the Ship Configuration and Logistics Support Information System (SCLSIS) data repository, CDMD-QA.

The Navy has identified software configuration tracking as an area of critical importance to the success of Strike Force systems engineering, communications and life cycle logistics support. Existing Strike Force Interoperability (SFI) configuration compatibility issues have drawn attention to software visibility discrepancies that exist within the current configuration management data repository. It is imperative that software configuration information is loaded, tracked and managed in CDMD-OA to provide sufficient identification of software assets and shipboard capabilities across platforms. Software records within CDMD-OA shall be captured and documented using the following prioritization methodology:

- a. All new Acquisition Software Programs,
- b. Tactical and Command and Control Systems,
- c. All other combat and C4I systems, and
- d. Other program office requests to use CDMD-OA as a software installation configuration management tool not mentioned above.
- 1.2 <u>Definitions</u>. The following definitions are provided for those common terms used in this document:
- a. Computer Software Configuration Item (CSCI). A CSCI is an aggregation of software that satisfies the requirements and performs the functions of the application software and system software. CSCIs may be further decomposed into Computer Software Components (CSCs), functionally or logically distinct software parts of a CSCI.

- b. <u>Software Identification Number</u>. The software identification number is a unique number used in specifications, documentation, manuals, engineering data, and software listings to identify the Computer Software Configuration Items (CSCI). The number shall also appear on all media (e.g., tapes, disks, etc.) containing the software. The basic CSCI identification number shall not change throughout the life cycle of the system. Versions, releases, and patches shall have unique identifiers that relate them to the basic CSCI (e.g., dash numbers as suffixes) and never go back in sequential assignment numbering schemes.
- c. Computer Firmware. An assembly composed of a hardware unit and a computer program integrated to form a functional entity whose configuration cannot be altered during normal operation. The computer program is stored in the hardware unit as an integrated circuit with a fixed logic configuration that shall satisfy a specific application or operational requirement.
- d. Computer Program. A series of instructions or statements in a form acceptable to computer equipment, designed to cause the execution of an operation or series of operations. A computer program may be either machine dependent or machine independent, and may be general purpose in nature or be designed to satisfy the requirements of a specialized process of a particular application. The form of a computer program may be a deck of punched cards, magnetic or paper tapes, disks, firmware, or other physical medium.
- e. Computer Software (or Software). A combination of associated computer programs and data required enabling the computer hardware to perform computational or control functions.
- f. Configuration Item (CI). Material items designated by Department of Defense Components for Configuration Management (CM). They may differ widely in complexity, size, and kind. Examples are an aircraft, ship, mobile test unit, navigation system, embedded computer, computer program, electronic system, test meter, or a round of ammunition.

# SECTION 2 Responsibilities

2.1 Responsibilities. The Configuration Data Managers (CDMs) and Software Configuration Managers (SCMs) (i.e. In-Service Engineering Agents (ISEAs)/Software Support Activities (SSAs)) are responsible for tracking, maintaining, and ensuring accuracy of software information as directed by their Program Manager (PM).

# a. Configuration Data Managers (CDMs):

- (1) Review all information received from data sources to ensure data accuracy and consistency with other available information. Sources of CDMD-OA information include the initiating activity or the cognizant engineering activity. Initiate actions to verify suspect data and to research and enter any missing data into CDMD-OA.
- (2) Verify that all software Record Type 2 (RT2) (see Section 3 for amplification of Record Types) Equipment Discipline Codes contain a value of: "V". Verify all RT2s have a Service Application Code (SAC) comprised of 'SFTWR' for installed software and 'SFTBU' for software left as back up or recovery copies and a Supply Support Requirement Code (SSRC) of 'N' for all software record submissions. Ensure all software RT2s are tied to the parent hardware configuration Repairable Identification Code (RIC).
- (3) Ensure all reported software changes are entered in CDMD-OA.
- (4) Advise NAVSEA 04L5 of critical or recurring software CSA procedural or interface problems.
- (5) Use the assigned RIC, which may be a Naval Inventory Control Point (NAVICP) generated RIC or a CDMD-OA assigned RIC, for the software CI.
- (6) Review and process all emergent software Report unauthorized changes and supporting rationale with recommendations to the cognizant SCM.
- (7) Assign Generic XRICs if software is found resident on the ship and is not previously loaded into CDMD-OA. Use the generic XRIC of "XSOFTWARE" with feedback

to the system owner for research and update. The SSA/ISEA/TSA/OEM, shall provide feedback to the CDM with resolution.

- (8) Provide feedback to Originator of disposition of workfiles (receipt, acceptance, rejection as well as modification to the records once in the master database).
- Software Configuration Managers (e.g. ISEAs/Technical Support Activities (TSAs), SSAs, Original Equipment Manufacturers (OEMs) etc.) shall be:
- (1) Responsible for the accuracy and completeness of the ship platform software data, transmission of the data to the CDM and ensuring the data reflects current baselines as well as modifications to those baselines.
- (2) Responsible for the accuracy and completeness of software loaded at Navy shore site Training Activities. Training Site unique software or software designed to offer a course of instruction on multiple variants of a system or equipment are to be included as part of the software load requirement and shall also
- (3) Identify inaccurate or incomplete software data in CDMD-OA and provide corrective transactions to the CDM to include:
  - Identification of top down breakdown (parent/child equipment relationships)
  - -"XSOFTWARE" resolution (see para 2.1.a(7))
- (4) Resolution of data discrepancies as requested by the CDM and
  - (5) Assignments of RIC
- (6) Interface with the hardware ISEA to determine any hardware/software discrepancies and correct as necessary.
- (7) Creation of CDMD-OA workfile(s) for transmission to the CDM. Naming convention for software configuration work files shall follow this format "SOFTWARECGXX" (i.e., CGXX being the ship type and hull number of the particular platform). Use Standard Data Interface Format (SDIF) when providing automated data.

- (8) Research NAVICP and CDMD-OA assigned software RICs to ensure one does not already; exist prior to requesting an assignment of a RIC.
- (9) Inform the ISEA and/or CDM if there are any changes to existing software RICs.
- CDMD-OA Software RICs. Until the X-RIC Module is reprogrammed in CDMD-OA to accommodate the new software business rules, control and assignment of CDMD-OA Software Specific RICs shall be accomplished via the designated NAVSEA 04L5 Agent. (See Section 7)
- NAVICE Software RICs. Follow existing procedures to obtain the RIC, but use the software identification number in the RIC nomenclature field.
- The SCMs (i.e. ISEAs/SSAs) and Installations Teams. The SCMs and installation Teams shall be responsible for removing obsolete versions or excess copies of software onboard U.S. Navy platforms, shore sites and training sites. One copy of the installed software may be left at the respective site with the marking (i.e., back up or recovery). Location, media, and serial number (or identification number) of the installed software must be provided back to the cognizant reporting activity. All other software version copies must be removed and returned to the cognizant reporting activity or destroyed by direction of that activity and reported as such.
- NAVSEA 04 and Ships' Program Managers (SPM). NAVSEA 04 and SPMs' roles and responsibilities are defined in reference (d).

# SECTION 3 Data Structure

# 3.1 CDMD-OA Record Types

Table 3-1 depicts the system-wide data elements in the CDMD-OA process which are divided into five logical groups or record types:

Record Type	Description	CDMD-OA Table
1	Hull Unique Data	activity
2	Configuration Data (System and Equipment)	config
3	Technical and Logistics Support Data	config_log
4	Alteration Data	config_alt
5	General and Narrative Data	config_jcn_notes

#### Table 3-1

Record Type 1 (RT1) contains ship level data that includes ship type and hull number, type commander code, ship name, CDM, ship status, and ship class. This record type is used for CDMD-OA initialization and is updated with ship level status and statistics.

Record Type 2 (RT2) contains descriptive data to identify and describe the CIs of the ship, ship systems, and installed equipment/components. A Record Type 2 can contain links to associated alteration data records (RT4), and/or logistics and technical data records (RT3) to fully describe the CI and associated logistics support. Equipment Discipline Code within the RT2 shall contain the value of 'V' for software.

Record Type 3 (RT3) contains logistics support and technical data related to a ship, system, or equipment. RT3 is generic in the sense that it can accommodate many types of technical and logistics data. More than one RT3 (i.e. drawing, technical manual) can relate to one RT2 configuration record. The data element Logistics Support Document Type (lsd\_type) identifies the technical and logistics data type.

The config\_log table uses a data element lsd\_type to identify the type of logistics support documentation that is related to a ship, system, or equipment. LSD files are linked to parent equipment records in the ship equipment file by HSC/APL combination or Parent RIN (Record type 2). The applicable lsd\_type codes for tracking software are as follows:

- a. CPP Computer Program Package
- b. SCM Software Control Manual
- c. SWP Software Programs

CPP	Computer Program Package - Instructions, executables, & "how to" information
SCM	Software Control Manual - Configuration control plan for managing software upgrades
SWP	Software Programs - The actual program

Record Type 4 (RT4) contains hardware and software alteration identification and status. Record Type 4s are always linked to an associated RT2 using the RT2's Record Identification Number (RIN). More than one RT4 can be associated to one RT2.

Record Type 5 (RT5) contains narrative and general information, which is not stored in CDMD-OA. RT5 is used to ensure that all ship-submitted 4790-CK transactions are forwarded to the CDM.

#### SECTION 4

Method for Tracking Software Configuration Records

#### 4.1 General.

- a. Software shall be tracked as; a CI RT2 and may be tracked down to the patch or version level. The level of software tracking shall be dependent on the audit requirements of that particular system. Alteration Records (RT4s) can store software data contained in Field Changes, ORDALTs, Engineering Changes, or Software Changes, but the software RT2 shall also reflect all required software data elements.
- b. Equipment Discipline Code (DISC) shall contain the value of "V" for all software configuration items.
- c. Service Application Code (SAC) shall contain the value of "SFTWR" for all software configuration items installed. The SAC of "SFTBU" shall be used to record software configuration back ups/recovery copies left at the site and "SFTDI" will be used for diagnostic software.
- d. The Equipment Identification Number (EIN) field shall contain the complete software version identification number. This field is 26 characters in length. If the software identification number exceeds this field capacity, enter as much of the number as possible.
- e. The Repairable Identification Code Nomenclature (RIC\_NM) field shall also contain the software version identification number preceded by the system designator (i.e., AN/SQQ-89) or the manufacturer's name (i.e., Microsoft) for commercial off the shelf software. This field is 46 characters in length. If the software identification number exceeds this field capacity, enter as much of the number as possible.
- f. A Component Characteristics File (CCF), record C, shall be associated with each software configuration record. The first positions shall contain the complete software version identification number ending with a semicolon ';' and associated information. The next lines shall contain the In-Service Engineering Agent and Software Support Activity point of contact name, email and/or phone number as well as any additional amplifying information to

identify the originator shall be entered. Special characteristics data can be added here as needed.

- g. The Positional Reference Identification (PRID) field shall be used to record the media (i.e., disk, tape, etc.) used to install the software. If there is more than one piece of media enter one of the media information here and all other pieces as Record Type 3s (RT3s) to the RT2 Configuration Record. Within the RT 3, use the Logistics Support Documentation (LSD) Type field and enter 'SWP' (as defined in Section 3, Paragraph 3.1), use the LSD Serial Number (SN) Field and enter the serial number of the Media (or identification number) and in the LSD Description (DESC) field record the type of media (i.e., disk, tape, etc). In the case of firmware, the media entry shall describe the type or number of the card containing the firmware. Commercial off the shelf products captured shall have the software date of release with the RT3 data.
- h. The Serial Number (SN) field shall be used to record the serial number (or identification number) of the media entered in the PRID field above.
- i. The Installation Status Code (ISC) field shall be used to capture the installed software application, back up or recovery copies left on site, and diagnostic software for the system requirement. A 'G' status code shall be used. Installed, back up and diagnostics software records are differentiated by the records' SAC SFTWR, SFTBU, and SFTDI respectively.
- 4.2 Repairable Identification Code (RIC). A NAVICP generated RIC or a CDMD-OA assigned RIC shall be used to track software.

The NAVICP generated RIC shall be obtained using existing processes in place today, however, the software identification number shall be used in the RIC Nomenclature Field. NAVICP Software RICS will begin with "SW".

The CDMD-OA assigned RIC shall be obtained from the Designated NAVSEA 04L5 Agent until the CDMD-OA XRIC Module is reprogrammed to automatically generate the software RIC. A unique software specific XRIC shall be assigned in the following format "XSFT00XXXXXX (XSFT00 = software, XXXXX = centrally assigned sequential number). (See Section 7.2)

Assigning a software-specific RIC will uniquely capture a software configuration item, provide visibility of the software to the community, and establish a unique configuration identification record in the SCLSIS database, CDMD-OA.

Software configuration items shall be tied to the equipment in which it is installed. Back up/Recovery Copies left on site shall be linked to its respective equipment within CDMD-OA. The Parent Repairable Identification Code (Par RIC) field and the Parent Record Identification Number (P RIN) field shall be used to maintain the appropriate system hierarchy. In some cases, equipment RICs (RT2) may need to be added.

4.3 Processing New Software Versions or Patches. Typically, changes to software can be handled with a CHANGE transaction. However, if the EIN has been changed, an ADD shall be processed to generate a new RT2 and a DELETE record is issued to remove the old RT2 RIN. The concept is to consider the new software version as a new configuration component and provide clear tracking of all changes.

This procedure applies to software patch variants as well. An emergent patch can be temporarily documented as a RT4 until the code has been compiled and a new software identification number is assigned. Once the new software identification number is assigned, the temporary RT4 can be deleted and replaced by the new RT2.

- 4.4 Remote Distribution of Software Updates. Any activity providing software updates via an online remote distribution process shall be required to maintain the correct revision in CDMD-OA. The activity shall include the methodology for managing the software updates in the CM plan (i.e., procedures to interface with CDMD-OA.)
- 4.5 Firmware. Firmware shall be tracked at the card level as a CI RT2. Firmware may be tracked as an alteration record RT4 if it is currently being tracked as such; however, in order to be able to identify all firmware records, all alteration records must be linked to the applicable software RT2 using the Parent RIN. If there is no software RT2 established, one must be created. numbers shall reflect changes with regard to field changes, Ordnance Alterations (ORDALTs), engineering changes, software changes, etc.

General Information Note: Coastal Systems Station Panama City has been tracking firmware with their associated RICS (Allowance Parts Lists (APLs)) for three years. Their process is documented in CSS Panama City Programmed Assets Management Plan (PAMP), Published for Shipboard Software Configuration Management Guidance and Policy dated July 13, 2000. Additional information can be obtained by contacting Jackie McClure, mcclure\_jackie@ncsc.navy.mil, (850) 234-4002 or Cathy Harris, catherine.e.harris@navy.mil, (850) 234-4015.

4.6 Reports/Queries. A software query/report called 'Software Report' has been developed within CDMD-OA for general Navy wide use. It resides at the CDMD-OA central site level and can be accessed, modified and saved at the User Level.

# SECTION 5 Existing Software Records

# 5.1 Process for Converting Existing Software Alteration Records to Configuration Records.

Software shall be tracked as a Configuration Item RT2 and must be tracked down to the patch level. Alteration Records (RT4's) can store software data for Field Changes, ORDALTS, Engineering Changes, or Software Changes, but the software RT2 shall also reflect all required software data elements.

RT4s can be maintained and linked to their corresponding software configuration record (RT2) once the change has been accomplished to provide a history or audit trail of the change. However, the RT4s cannot be maintained in lieu of the software configuration record (RT2).

The Software RT4's currently in CDMD-OA tied to a hardware configuration record (RT2), but with no associated software configuration record (RT2), can remain until the software configuration changes. At that time, the new software alteration record (RT4) shall be tied to a software configuration record (RT2). If a software configuration record (RT2) does not exist one must be added.

The following format shall be used for new ordnance alteration records (RT4's):

0SXXXXXYYY (0S = software alteration, XXXXX = alteration number, YYY = a 3 digit computer generated assigned serial number).

All Field Changes for electronic alteration records shall be changed via submitting a new RIC request as noted previously in paragraph 4.1.

Systems not currently using RT4's shall use the following format:

SCXXXXXYYY (SC = software change alteration, XXXXX = alteration number, YYY = a 3 digit computer generated assigned serial number).

### SECTION 6 Data Elements within CDMD-OA

### 6.1 Required Use of CDMD-OA Data Elements

Table 6-1 identifies the data elements required for the CDMD-OA software RT-2 to adequately track software records. Note: Existing CDMD-OA data element definitions in the SCLSIS Tech Spec 9090-700 Series will be expanded to incorporate the mandatory software CM reporting requirements reflected below.

#### \* Mandatory-New Construction;

# \*\*Mandatory for Software Records

Data Element/ Data Source	Requirement	DEN	CDMD-OA Mandatory
ACTION / Originator	As required by the SCLSIS TECH SPEC	E033	YES
ALT ID NBR / LCM/ISEA/AIT	As required by the SCLSIS TECH SPEC	E319	YES
ALT RIC / Originator	As required by the SCLSIS TECH SPEC	B008	YE\$
ALT STAT / Originator	As Required by the SCLSIS TECH SPEC	D037	YES
ALT TYPE / Originator	As Required by the SCLSIS TECH SPEC	E317	YES
CAGE / Originator	As required by the SCLSIS TECH SPEC	C035	YES
CDM /	As required by the SCLSIS TECH SPEC	E351	YES
RPTG ACT / Originator	As required by the SCLSIS TECH SPEC	T060	YES
RPTG DATE / Originator	As required by the SCLSIS TECH SPEC	T060B	YES
RPTG ID / Originator	As required by the SCLSIS TECH SPEC	T060A	YEŞ
CEI / Originator	As required by the SCLSIS TECH SPEC: Same as host	E225	NO
DISI / CDM	MANDATORY** Follow existing edit checks. If RIC is an X-RIC it shall contain an "A". If there is a valid RIC, the field shall contain a "B". No "N" is allowed.	X013	YES
DO/VC / Originator	As required by the SCLSIS TECH SPEC	D037	YES

(RT2) &		1	
assigned by			
SCLSIS			
database			
(RT4)			
DISC /	MANDATORY** - Use 'V' for	N/A	YEŞ
CDM	software		
EFD /	As required by the SCLSIS TECH	T057	YES (for
Originator	SPEC		adds)
EIC /	MANDATORY** - Use the Parent	D008D	YEŞ
Originator	equipment EIC		
EIN /	MANDATORY** - Identify the	E224	YES
Originator	complete software identification		
	number. (i.e., Might derive this	1	
	number from an official document		
	like a Version Description	1	
	Document)		
sn /	MANDATORY** - The serial number of	D032	YES
Originator	the media by which the software		
	was installed (if more than one -		
	use the first one - all other		
	media & SN shall be loaded as RT3.	}	
	Fill in until all spaces are used	ł	
ESD /	if longer than field.	TOES	\/F0
i '	Mandatory** - Do not change from	TO58	YES
Originator VAL DATE /	host equipment ESD	N/A	YES
CDM	As required by the SCLSIS TECH SPEC; Initialized blank. Once	IWA	169
CDM	ship validates then the date is		
	entered.		
VAL WORTH /	Mandatory** - Initialized with a	<u> </u>	YES
CDM	m2".		1 60
HSC /	As required by the SCLSIS TECH	T063	YES
Originator	SPEC; First 5 characters must		
	contain ESWBS for host equipment.		
	If Trident, the first 4		
	characters.		
HSCI /	As required by the SCLSIS TECH	T063A	YES
Originator	SPEC		
ISEA /	As required by the SCLSIS TECH	T017B	YES
Originator	SPEC		
INSTDATE /	As required by the SCISIS TECH	N/A	YES
CDM	SPEC; Identify the year, month,		
	and day the equipment was	{	
T\$\$ /	installed	<u> </u>	
ISC /	As required by the SCLSIS TECH	E222	YES

CDM, SHIP	SPEC; MANDATORY** - 'G' for		
	installed software and back ups		
LOC /	MANDATORY** - for software	E052	NO
Originator	configuration records, Host		
	equipment location.		
DOC DATE /	As required by the SCLSIS TECH	TO59C	NO
Originator	SPEC		
DOC DES /	As required by the SCLSIS TECH	TO59B	NO
Originator	SPEC		
DOC SN /	As required by the SCLSIS TECH	T059	YES (RT 3)
Originator	SPEC		
DOC TYPE /	As required by the SCLSIS TECH	T059A	YEŞ
Originator	SPEC; MANDATORY** - "VDD -		
	Version Description Document",		
<b>\</b>	"CPP - Computer Program Package,		
	Logistics Type document", "SCM -		
	Software Control Manual", "SWP -		
	Software Programs" [See Note]		
NHA /	As required by the SCLSIS TECH	E239	YES
Originator	SPEC; MANDATORY** - EIN of the		
	host equipment		
PRIN /	As required by the SCLSIS TECH	E221A	YES
Originator	SPEC		
PAR RIC /	As required by the SCLSIS TECH	D009	NO
Originator	SPEC		147.0
MEC/FBM MEC	As required by the SCLSIS TECH	C008D	YES
/	SPEC; Same as host	/B	
Originator /	harman and har the government	00001	1/50
Joint	As required by the SCLSIS TECH	C003Y	YES
CDM&SPM	SPEC; Same as host	[ [	
PAR SN /	MANDATORY** - Serial Number of the	50005	NA
Originator		D032D	NO
Originator	Host equipment where the software resides.	}	
PRID /	MANDATORY** - Software media type	E000	NO.
Originator	used to install the software (if	E093	NO
QL + g + LLQ C QL	more than one list others as RT3s)	]	
PSDIN /	As required by the SCLSIS TECH	L090	*
Shipbuilder	SPEC (New Construction)	1.090	
PSDN /	As required by the SCLSIS TECH	L088	*
Shipbuilder	SPEC (New Construction)	F000	
QTY /	MANDATORY** - Shall always be	DO11	YES
Originator	11'.		( EG
RNV /	As required by the SCLSIS TECH	E346	YES (for
Originator	SPEC	L-040	adds)
RIN /	As required by the SCLSIS TECH	E221	YES
	I TO TOWART CAN MY CITE DOTIOTO TECH	EZZI	100

SCLSIS or	SPEC; Assigned by system on record		
Originator	ADD.	ļ	
RT /	As required by the SCLSIS TECH	T062	YES
Originator	SPEC		
RIC /	MANDATORY** - NAVICP RIC, CDMD-OA	D008	YES
Originator	RIC ("XSFT00xxxxxxx") or Generic		
	XRIC "XSOFTWARE" (use by CDM)		
SAC /	MANDATORY** - Use "SFTWR" for	E010A	YEŞ
Originator	installed software (all XRIC's and		
	RIC's); Use "SFTBU" for back	}	
	up/recovery copies left on site &	<u>}</u>	
	"SFTDI" for diagnostic software		
<u>.</u>	(all XRTC's and RIC's)		
SC /	As required by the SCLSIS TECH	D038	*
Shipbuilder	SPEC		
Type of		TO88	*
Number Code	As required by the SCLSIS TECH	]	
for PSDN /	SPEC		
Shipbuilder		Toza	VEC
SSRC /	Mandatory** - Initialize with "N"	T075	YES
Supply Support	for all CDMD-OA Assigned RICs		
Requirement	"XSFTxxxxxx"; A mandatory data		
Code	element used to identify supply		
Code	support requirements for a commodity; used by NAVICP to		
	distinguish records that should be		
	reviewed for APL assignment ("R"		
	entry) from those that are non APL		
	worthy ("N" entry).		
VS/AC /	As required by the SCLSIS TECH	E223	YES
Originator	SPEC		
WCRE /	As required by the SCLSIS TECH	E128	NO
Originator	SPEC		

Note: VDD - Description of program build,

CPP - Instructions, executables, & how to information,

SCM - Configuration Control Plan for managing software

upgrades,

SWP - Actual programs.

# Table 6-1

#### SECTION 7

#### RIC Assignments

7.1 General. Prior to submitting a RIC assignment request, review the level of software reporting as indicated below and in Section 4 of this Software Management Plan. The level of reporting shall dictate how many RICs are necessary to load for sufficient software identification. If the specific system is not listed in the paragraphs below, the target level for software reporting is at the equipment level.

If software versions are "bundled", a unique RIC shall be required for each individual element of that "bundle".

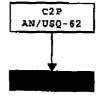
Review Example 1 and Example 2 closely. A unique RIC assignment shall be necessary for each of the following versions:

2.1.7 PL76, TMP T2X077553 w/Patch xx, DSP D2X072E w/Patch xx, OMS Base 2X0702, DMP 2.1.X.7.1 DDK 2.1.X.7.4.

The same is true for example 3. When any version of software within a bundle is changed, and if it causes any of the other versions to be changed, those new version numbers shall require a new unique software RIC when installed.

Each version of software, whether associated with different systems or the same system shall have its own unique RIC. Further, if a software version is used by more than one Variant or Mod of a system RIC Assignments can be used with a blank in the Variant or Mod location (i.e., AN/USQ-T46())

#### Example #1

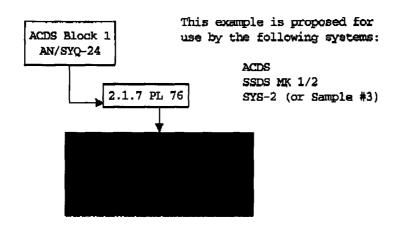


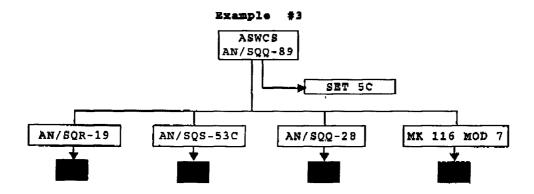
This example is proposed For use by the following systems:

AUTO-ID	NAVSSI
AWS	RADDS/ASDS
BFTT	RAIDS
C2P	RAM
CIWS	SGS/AC
CIFF (UPX-36)	SLQ-32
CV-TSC	SPS-48E
MK 92	TAS
nssm\$	TPX-42

BFTT 3.0.2B) thus reducing the number of RIC Assignments since the RIC can be used on multiple Variants for the system. These unique RICs shall include any patches that were necessary to maintain the system onboard.

#### Example #2





This example is proposed for use by the following systems:

SQQ-89

WSN-7

GCCS-M

#### 7.2 Contact Information.

- a. A NAVICP generated RIC can be obtained using the existing processes and contacts in place today. However, the software identification number must be used in the RIC Nomenclature Field to be in accordance with these procedures.
- b. A CDMD-OA assigned RIC can be obtained by contacting the Designated NAVSEA 04L5 Agent until the CDMD-OA XRIC Module is reprogrammed to automatically generate the software RIC. A unique software-specific RIC shall be assigned.
- c. Until CDMD-OA has been modified to automate the procedures contained this document, requests for CDMD-OA assigned RICs shall be submitted, via email, to D. Caroline Kowalsky, NAVSEA 04L526, KowalskyDC@kpt.nuwc.navy.mil. She can also be reached by phone at (360) 315-7491. Once a number is assigned, a return email will be sent to the originator of the request with the unique RIC number.
- 7.3 Required Data for CDMD-OA RIC Assignment. Each software version RIC request must have (including each version within a "bundle", if applicable):

Ship or Ships: (by hull number)

System:

Software Version Number:

Media: by which the software shall be delivered & any amplifying information (clarifying remarks or notes which are considered necessary)

Parent Equipment: (if it is different than system name)

SSA POC - Name:

Telephone Number:

Command:

ISEA POC - Name:

Telephone Number:

Command:

# **ACRONYM LIST**

CAGE	Commercial and Government Entity
CCF	Component Characteristics File
CDM	Configuration Data Manager
CDMD-OA	Configuration Data Managers' Database-Open
	Architecture
CEI	Critical Equipment Identifier
CFFC	Commander, Fleet Forces Command
Cī	Configuration Item
CM	Configuration Manager/Configuration Management
CPP	Computer Program Package
CSA	Configuration Status Accounting
CSC	Computer Software Components
CSCI	Computer Software Configuration Item
	· · · · · · · · · · · · · · · · · · ·
DESC	Description
DISC	Equipment Discipline Code
DISI	Data Interface Suppression Indicator
DO/VC	Data Originator/Validation Code
	_
EFD	Equipment Functional Description
EIC	Equipment Identification Code
EIN	Equipment Identification Number
ESD	Equipment System Designator
FBM	Fleet Ballistic Missile
FMP	Fleet Modernization Program
	-
HSC	Hierarchical Structure Code
	•
ISEA	In-Service Engineering Agent
ISC	Installation Status Code
LSD	Logistics Support Documentation
MCC	Maintenance/Mission Criticality Code
	•
NAVICP	Naval Inventory Control Point
NHA	Next Higher Assembly
OEM	Original Equipment Manufacturer
ORDALT	Ordnance Alteration

PAR RIC	Parent Repairable Identification Code
PARŚN	Parent Serial Number
PRID	Positional Reference Identification
PRIN	Parent Record Identification Number
PSDIN	Procurement Source Document Item Number
PSDN	Procurement Source Document Number
QTY	Quantity
RIC	Repairable Identification Code
RIN	Record Identification Number
RNV	Reason Not Validated
RT	Record Type
SAC	Service Application Code
SCLSIS	Ships Configuration and Logistics Support Information System
SCM	Software Configuration Manager/Software Control
BCM	Manual
SDIF	Standard Data Interface Format
SFI	Strike Force Interoperability
SPM	Ship Program Manager
SQI	Software Quality Improvement Program
SSA	Software Support Activity
SSRC	Supply Support Requirement Code
SWP	Software Programs
TSA	Technical Support Activity
DOD	Version Description Document
XRIC	Pseudo Repairable Identification Code